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<151> 1999-05-17
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<160> 86
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Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu
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Trp Asn Trp Phe
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Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg fle Leu Ala Val Glu
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Arg Tyr Leu Lys Asp Gln
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             20
Trp Asn Trp Phe
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20 25 30

Trp Asn Trp Phe 35

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Tyr Thr Ser Leu Ile Tyr Ser Leu Leu Glu Lys Ser Gln Thr Gln Gln

1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu
20 25 / 30

Trp Asn Trp Phe

<210> 6

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Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Ile Phe
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Gly Asn Trp Phe 35

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Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe
                                                       30
                                  25
Thr Asn Trp Leu
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  1
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                                      10
                                                          15
Leu Gln Leu Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu
             20
                                 25
Ala Val Glu Arg Tyr Leu Lys Asp Gln
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                  5
                                      10
                                                          15
  1
Glu Phe Asp Ala Ser Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser
                                                      30
             20
                                  25
Leu Ala Phe Ile Arg Lys Ser Asp Glu Leu His Asn Val Asn Ala
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Gly Lys Ser Thr Thr
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Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp
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Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr
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Cys Asn Gly Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys
                                  25
Tyr Lys
<210> 15
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Asn Gly Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr
                                  25
Lys Asn
<210> 16
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                                                           15
  1
                  5
                                      10
Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn
                                  25
                                                       30
Ala Val
<210> 17
<211> 34
<212> PRT
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      peptide
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  1
                  5
                                      10
                                                           15
Asp Ala Lys Val Lys Leu Ile Lys/Gln Glu Leu Asp Lys Tyr Lys Asn
                                  25
                                                       30
             20
Ala Val
<210> 18
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      peptide
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                                      10
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                  5
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Ala Leu Leu Ser Thr Asn Lys Ala Val Val Ser Leu Ser Asn Gly Val 20 25 30 Ser <210> 19 <211> 33 <212> PRT <213> Artificial Sequence <220> <223> Description of Artificial Sequence; synthetic peptide <400> 19 Ala Val Ser Lys Val Leu His Leu Glu Gly Glu Val Asn Lys Ile Ala 5 15 Leu Leu Ser Thr Asn Lys Ala Val Val Ser Leu Ser Asn Gly Val Ser 20 25 30 Val <210> 20 <211> 33 <212> PRT <213> Artificial Sequence <220> <223> Description of Artificial Sequence: synthetic peptide <400> 20 Val Ser Lys Val Leu His/Leu/Glu Gly Glu Val Asn Lys Ile Ala Leu 10 1 5 15 Leu Ser Thr Asn Lys Ala Val Val Ser Leu Ser Asn Gly Val Ser Val 20 25 30 Leu <210> 21

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Ser Asn Gln

<210> 35 <211> 35 <212> PRT <213> Artificial Sequence <220> <223> Description of Artificial Sequence: synthetic peptide <400> 35 Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser 20 25 Asn Gln Lys <210> 36 <211> 35 <212> PRT <213> Artificial Sequence <220> <223> Description of Artificial Sequence: synthetic peptide <400> 36 Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys 10 Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser Asn Gln Lys Leu 35 <210> 37 <211> 35 <212> PRT <213> Artificial Sequence <220> <223> Description of Artificial Sequence: synthetic peptide

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Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Ar# Arg Ser Asn Gln
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                                  25
Lys Leu Asp
         35
<210> 38
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                  5
                                      10
                                                           15
Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser Asn Gln Lys
             20
                                  25
                                                       30
Leu Asp Ser
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Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser
  1
                  5
                                      10
                                                           15
Asp Leu Glu Glu Ser Lys Glu †rp Ile Arg Arg Ser Asn Gln Lys Leu
             20
                                  25
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Asp Ser Ile 35 <210> 40 <211> 35 <212> PRT <213> Artificial Sequence <220> <223> Description of Artificial Sequence: synthetic peptide <400> 40 Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp 10 15 Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser Asn Gln Lys Leu Asp 20 25 30 Ser Ile Gly 35 <210> 41 <211> 35 <212> PRT <213> Artificial Sequence <220> <223> Description of Artificial Sequence: synthetic peptide Asp Pro Ile Asp Ile Ser Ile Gl/u Leu Asn Lys Ala Lys Ser Asp Leu 1 5 10 Glu Glu Ser Lys Glu Trp Tle Arg Arg Ser Asn Gln Lys Leu Asp Ser 20 Ile Gly Asn 35 <210> 42 <211> 35 <212> PRT <213> Artificial Sequence

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Lys Glu Trp Ile Arg Arg Ser Asn Gln Lys Leu Asp Ser Ile Gly Asn 25 30 20 Trp His Gln 35 <210> 45 <211> 35 <212> PRT <213> Artificial Sequence <223> Description of Artificial Sequence: synthetic peptide <400> 45 Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser Asn Gln Lys Leu Asp Ser Ile Gly Asn Trp 20 25 His Gln Ser 35 <210> 46 <211> 35 <212> PRT <213> Artificial Sequence <223> Description of Artificial Sequence: synthetic peptide <400> 46 Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu 10 Trp Ile Arg Arg Ser Asn Gin Lys Leu Asp Ser Ile Gly Asn Trp His 20 25 30 Gln Ser Ser 35

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             20
                                  25
                                                       30
Val Gln Ser
         35
<210> 50
<211> 35
<212> PRT
<213> Artificial Sequence
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  1
                  5
                                      10
                                                           15
Leu Lys Glu Ala Ile Arg Asp Thr Asn Lys Ala Val Gln Ser Val Gln
                                  25
             20
                                                       30
Ser Ser Ile
         35
<210> 51
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                  5
                                      10
                                                           15
Ala Ile Arg Asp Thr Asm Lys Ala Val Gln Ser Val Gln Ser Ser Ile
             20
                                  25
                                                       30
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Gly Asn Leu 35 <210> 52 <211> 35 <212> PRT <213> Artificial Sequence <220> <223> Description of Artificial Sequence: synthetic peptide <400> 52 Val Glu Ala Lys Gln Ala Arg Ser Asp/Ile Glu Lys Leu Lys Glu Ala 1 5 10 15 Ile Arg Asp Thr Asn Lys Ala Val Glm Ser Val Gln Ser Ser Ile Gly 20 30 Asn Leu Ile 35 <210> 53 <211> 35 <212> PRT <213> Artificial Sequence <220> <223> Description of Artificial Sequence: synthetic peptide <400> 53 Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile 5 10 1 Arg Asp Thr Asn Lys Ala Wal Gln Ser Val Gln Ser Ser Ile Gly Asn 25 30 20 Leu Ile Val 35 <210> 54 <211> 35 <212> PRT <213> Artificial Sequence

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Lys Ala Val Gln Ser Val Gln Ser Ser Ile Gly Asn Leu Ile Val Ala
             20
                                                      30
Ile Lys Ser
         35
<210> 58
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Ala Val Gln Ser Val Gln Ser Ser Ile Gly Asn Leu Ile Val Ala Ile
             20
                                  25
                                                      30
Lys Ser Val
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Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe \$ly Asn Trp Phe 40 35 45 <210> 64 <211> 35 <212> PRT <213> Artificial Sequence <220> <223> Description of Artificial Sequence synthetic peptide <400> 64 Trp Gln Glu Trp Glu Arg Lys Val Asp Phe/Leu Glu Glu Asn Ile Thr 5 1 10 Ala Leu Leu Glu Glu Ala Gln Ile Gln Glu Lys Asn Met Tyr Glu 20 25 30 Leu Gln Lys 35 <210> 65 <211> 35 <212> PRT <213> Artificial Sequence <220> <223> Description of Artificial \$equence: synthetic peptide Gln Glu Trp Glu Arg Lys Va/ Asp/Phe Leu Glu Glu Asn Ile Thr Ala 5 10 15 1 Leu Leu Glu Glu Ala Gla Ile Gin Glu Lys Asn Met Tyr Glu Leu 30 20 25 Gln Lys Leu 35 <210> 66 <211> 35 <212> PRT <213> Artificial Sequence 28

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                                                           15
Leu Glu Glu Ala Gln Ile Gln Gln Glu Lys Asn∥Met Tyr Glu Leu Gln
             20
                                  25
                                                      30
Lys Leu Asn
<210> 67
<211> 35
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Trp Glu Arg Lys Val Asp Phe Leu Glu/Glu Asn Ile Thr Ala Leu Leu
                                      10
Glu Glu Ala Gln Ile Gln Gln Glu Lys Asn Met Tyr Glu Leu Gln Lys
                                                      30
             20
Leu Asn Ser
         35
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10

15

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Lys Leu Glu Ala Lys Glu Leu Leu Glu Ser Ser Asp Gln Ile Leu Arg
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Ser Met

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Met Lys